

WHAT IS CLAIMED IS:

1 1. A hand-held, portable, aerosol drug delivery system, comprising:
2 a disposable container containing a drug formulation;
3 an aerosol generator for aerosolizing the drug formulation;
4 a prevention device which prevents access to the drug formulation when in
5 an inactive state and which permits access to the drug formulation when in an activated
6 state.

1 2. A system as in claim 1, wherein the prevention device comprises
2 an electronic lockout device having a lockout element that is positioned in a dose
3 preventing position when in the inactive state, and is movable to a dosing permitting
4 position when electric current is supplied to place the lockout device in the activated
5 state.

1 3. A system as in claim 2, wherein the lockout device further
2 comprises circuitry for supplying electrical current to move the lockout element to the
3 dose permitting position when the lockout device is in the activated state.

1 4. A system as in claim 2, wherein the lockout device further
2 comprises a controller having an associated memory for storing a dosing condition, and
3 wherein the controller is configured to send a signal to place the lockout device in the
4 activated state only after the dosing condition has been satisfied.

1 5. A system as in claim 2, wherein the container comprises a canister,
2 and wherein the aerosol generator comprises a metering valve and an actuator operably
3 coupled to the canister.

1 6. A system as in claim 5, further comprising a housing, wherein the
2 canister is reciprocally held within at least a portion of the housing between a home
3 position and a dosing position where the actuator is engaged to open the metering valve
4 and to permit the escape of a metered amount of the drug formulation from the canister.

1 7. A system as in claim 6, wherein the lockout element is positioned
2 to prevent engagement of the actuator when in the dose preventing position to thereby
3 prevent opening of the metering valve.

1 8. A system as in claim 7, wherein the lockout element has a distal
2 end that is engageable with the canister to prevent substantial displacement of the canister
3 into the housing when the lockout element is in the dose preventing position.

1 9. A system as in claim 8, wherein upon placement of the preventing
2 device into the activated state, the distal end of the lockout element is retracted to permit
3 displacement of the canister into the housing and to permit engagement of the actuator to
4 open the metering valve.

1 10. A system as in claim 7, wherein the canister is movable within the
2 housing when the preventing device is in the inactive state, and further comprising a stop
3 that is reciprocally disposed within the housing below the actuator, and wherein the
4 lockout element has a distal end that is engageable with the stop when in the activated
5 state to prevent movement of the stop within the housing such that displacement of the
6 canister engages the actuator with the stop to permit dispensing of the metered drug
7 formulation when the preventing device is in the activated state.

1 11. A system as in claim 1, further comprising a high pressure gas
2 source to assist in aerosolizing the drug formulation when the preventing device is in the
3 activated state.

1 12. A system as in claim 1, further comprising a dose counter disposed
2 to count the number of doses of the drug formulation dispensed from the container.

1 13. A system as in claim 12, wherein the container is reciprocatably
2 disposed within a housing, and wherein the dose counter comprises a dose counting
3 circuit positioned to sense when the container has been reciprocated within the housing.

1 14. A system as in claim 13, wherein the dose counter further
2 comprises a display for indicating if the container contains an amount of drug
3 formulation.

1 15. A system as in claim 5, further comprising a nozzle operable
2 coupled to the canister, and wherein the housing further includes a mouthpiece disposed
3 to receive the drug formulation from the nozzle.

